Buprenorphine Hydrochloride

Sublingual tablet: 0.4,2,8mg



Renovate Your Life

Buprenorphine Hydrochloride

Buprenorphine is a partial mu-opioid receptor agonist and κ -opioid receptor antagonist; it's used for the treatment of severe pain and also commonly used for the treatment of severe opioid addiction. Buprenorphine may also be a preferred agent over methadone (which is also commonly used to treat severe pain and opioid use disorder (OUD)), as it has less effect on QT interval prolongation, fewer drug interactions, reduced risk of sexual side effects and an improved safety profile with a lower risk of overdose and respiratory depression.

- Lower abuse potential
- Lower level of physical dependence
- Less withdrawal discomforts
- Greater safety in overdose



Buprenorphine is an evidence-based, safe, effective treatment option for OUD to help patients overcome opioid withdrawal symptoms.

Worldwide, about 0.5 million deaths are attributable to drug use.

More than 70% of these deaths are related to opioids.

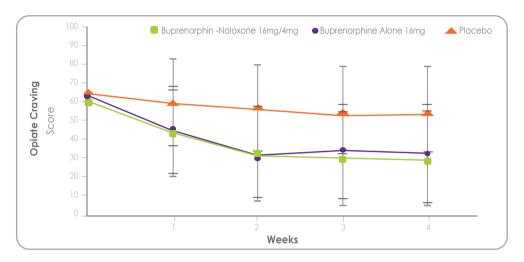
More than 30% of those deaths caused by opioids overdose.

Medication Assisted Treatment (MAT)²:

Medication assisted treatment (MAT) is the use of medications (e.g., methadone, buprenorphine, or naltrexone), in combination with counseling and behavioral therapies, to provide a "whole-patient" approach to the treatment of substance use disorders. Research shows that a combination of medication and therapy can successfully treat these disorders, and for some people struggling with addiction, MAT can help sustain recovery. MAT is also used to prevent or reduce opioid overdose. MAT treatment should be a safe, legal, affordable and oral route administered.

Craving as a Therapeutic Target in Opioid Use Disorder (OUD)³

Based on randomized controlled trial in patients with opiate dependence, Self-reported opiate craving was assessed as the peak craving during the prior 24 hours measured on a 0 to 100mm visual analogue scale. Statistically significant reductions in craving were reported for comparisons between BUP and BUP-naloxone groups versus placebo at all post-baseline time points.



Indications4:

- Maintenance treatment of moderate to severe opioid use disorder.
- Management of pain severe enough to require around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate.

Pharmacokinetics⁴:

Bioavailability	29%
Protein binding	96%
Metabolism	Hepatic CYP 3A4
Half-life	37 Hours
Excretion	Feces/Urine

Administration⁴:

Tablet should be placed under the tongue until dissolved (can take up to 10 minutes to fully dissolve); should not be cut, chewed, or swallowed.

Dosings⁴:

Based on clinical guidelines for the use of buprenorphine in the treatment of opioid addiction, titrate gradually due to patient response and adverse effects.

Contraindications4:

Hypersensitivity to buprenorphine or any component of the formulation; significant respiratory depression; acute or severe asthma in an unmonitored setting or in the absence of resuscitative equipment; GI obstruction including paralytic ileus (known or suspected).

Warnings and Precautions⁴:

Use with caution in patients with hypovolemia, cardiovascular disease, hypokalemia, hypomagnesemia, clinically unstable cardiac disease, moderate hepatic impairment, renal impairment, compromised respiratory function, adrenal insufficiency, biliary tract dysfunction, ileus or bowel obstruction, acute ulcerative colitis and active Crohn's disease, delirium tremens, head injury, intracranial lesions or elevated intracranial pressure (ICP), Obesity, prostatic hyperplasia, toxic psychosis, history of seizure disorders, sleep-disordered breathing, thyroid dysfunction, cachectic or debilitated patients.

Pregnancy and Breastfeeding⁴:

Buprenorphine crosses the placenta and is present in breast milk; the risk or benefit of treatment to the mother and infant should be considered.

Drug Interactions⁴:

Opioid agonist and antagonist, CYP3A4 inducers and inhibitors, CNS depressants.

Side Effects⁴:

>10%: Diaphoresis, Abdominal pain, Nausea, Infection, Headache, Insomnia

1% to 10%: Constipation, Vomiting

<1%: Opioid withdrawal syndrome, Respiratory depression



Reference:

1-WHO/opioid-overdose/2022 2-Medication-Assisted Treatment for Opioid Use Disorder Study (MAT Study)/CDC/2019 3-Kakko, Johan et al. (2019). Craving in Opioid Use Disorder: From Neurobiology to Clinical Practice. Frontiers in Psychiatry. 10. 10.3389/fpsyt.2019.00592. 4-Buprenorphine monograph/Uptodate/2022